

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,095	01/27/2006	Peter A. Fortman	06975-551US1	9000
26171 7590 06/25/2007 FISH & RICHARDSON P.C. P.O. BOX 1022			EXAMINER	
			NGUYEN, QUANG N	
MINNEAPOLIS, MN 55440-1022			ART UNIT	PAPER NUMBER
			2141	
			MAIL DATE	DELIVERY MODE
			06/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action

Application No.	Applicant(s)	
10/519,095	FORTMAN ET AL.	
Examiner	Art Unit	
Quang N. Nguyen	2141	

Before the Filing of an Appeal Brief -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 12 June 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. X The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: The period for reply expires _____months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b), ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL 2. The Notice of Appeal was filed on ____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below); (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal: and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: . (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): 6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. X For purposes of appeal, the proposed amendment(s); a) \(\simega) \text{ will not be entered, or b) X will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: None. Claim(s) objected to: None. Claim(s) rejected: 1-9 and 13-57. Claim(s) withdrawn from consideration: None. AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. 🔲 The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. X The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See attachment. 12. Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). 13. ☐ Other: .

Detailed Action

1. This Office Action is responsive to the Amendment filed on 06/12/2007. Claim 25 has been amended. Claims 10-12 have been cancelled. Claims 1-9 and 13-57 are pending for examination.

Claim Objections

2. Claim 39 is objected to because of the following informalities:

On line 13 of claim 39: "determine whether at least on of ..." should be "determine whether at least one of ..."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2141

4. Claims 1-9 and 13-57 are rejected under 35 U.S.C. 102(e) as being anticipated by Selgas et al. (US 6,571,290), hereinafter "Selgas".

5. As to claim 1, **Selgas** teaches a computer-implemented method for modifying network configuration information on a client node, the method comprising:

establishing a network connection between a client node and a host node using at least one network configuration parameter (after the client dispatch application 200 has determined the proper dial-in number, the user's modem is initialized and dialing occurs to connect the user 110 to the access service 106 via the predetermined ISP 102 using the selected dial-in number) (Selgas, Fig. 2 and col. 14, lines 38-42);

accessing configuration history information describing parameters of a previous and no longer active network connection between the client node and the host node (collecting and storing the network services information, i.e., the configuration history information, in the network services database 206 on the user node 110a, 110b, wherein the network services database 206 contains access information for each dial-in number for a particular ISP such as one or more PAP IDs/passwords, default routing information and configuration information to configure the user's modem, such as data compression information and speed) (Selgas, Fig. 2, col. 9, lines 39-62 and col. 17, lines 40-65);

accessing policy information including a desired network connection performance rule (the access service 106 offers Internet access to the user 110 via a plurality of ISPs 102 based on the appropriate level of service requested by the user such as the "lowest

Art Unit: 2141

cost service", the "highest reliability service", the "most reliable service", or combinations thereof, i.e., based on a desired network connection performance, stored in the network services database 206) (Selgas, col. 8, lines 32-54, col. 10, lines 4-11 and col. 15, lines 22-34);

using the configuration history information along with the policy information to determine whether at least one of the parameters of the previous and no longer active network connection fails to satisfy the desired network connection performance rule (based on the received header information including user ID, PAP ID, network services databases 206, etc., the access service 106 determines what, if any, updates are required to be made to the user client's dispatch application, databases, or network access devices operating system wherein such updates may include new dial-in locations/numbers, new PAP IDs/passwords, change of phone numbers, area codes or any other information relating to gaining access to the ISP 102) (Selgas, col. 8, lines 32-54, col. 14, line 62 – col. 15, line 34 and col. 17, lines 40-65); and

if it is determined that the at least one of the parameters of the previous and no longer active network connection fails to satisfy the desired network connection performance rule, modifying the at least one of the network configuration parameter used to establish the network connection between the client node and the host node (if any updates are required to be made to the user client's dispatch application, databases, etc., the access service 106 will generate and transmit these updates to the user 110, i.e., identifying and providing the user 110 with information needed to access

Application/Control Number: 10/519,095

Art Unit: 2141

one or more desired ISPs 102 based on cost, location, availability, reliability, etc.)
(Selgas, col. 8, lines 32-54, col. 17, lines 40-65 and col. 20, line 35-50).

- 6. As to claim 2, **Selgas** teaches the method of claim 1, wherein accessing the policy information includes receiving the policy information from the host node; and analyzing the policy information (the access service 106 identifies and provides the user 110 with policy information including access information needed to access one or more desired ISPs 102 that meet the customer desired low cost operation, reliability operation, and/or availability operation) (Selgas, col. 8, lines 32-54, col. 17, lines 40-65 and col. 20, line 35-50).
- 7. As to claim 3, **Selgas** teaches the method of claim 1, wherein:

establishing the network connection includes establishing a modem connection using at least one modem configuration parameter (after the client dispatch application 200 has determined the proper dial-in number, the user's modem is initialized and dialing occurs to connect the user 110 to the access service 106 via the predetermined ISP 102 using the selected dial-in number) (Selgas, Fig. 2 and col. 14, lines 38-42);

modifying the at least one network configuration parameter includes modifying the at least one modem configuration parameter (the updated ISP-specific access information comprising information such as one or more PAP IDs/passwords, default routing information and configuration information to configure the user's modem such as dial-in number, data speed/compression information) (Selgas, col. 17, lines 40-65).

Art Unit: 2141

8. As to claim 4, **Selgas** teaches the method of claim 1, further comprising:

if it is determined that at least one of the parameters of the previous and no longer active network connection fails to satisfy the desired network connection performance rule, modifying a plurality of the network configuration parameters (if any updates are required to be made to the user client's dispatch application, databases, etc., the access service 106 will generate and transmit these updates to the user 110) (Selgas, col. 8, lines 32-54, col. 17, lines 40-65 and col. 20, line 35-50); and

establishing a second network connection between the client node and the host node using the modified plurality network configuration parameters (after receiving the updated ISP-specific access information, the client dispatch application 200 may disconnect the user 110 from the current ISP 102 and automatically dial and reconnect the user 110 to the desired ISP 102 associated with the ISP-specific access information, i.e., associated with the modified plurality network configuration parameter) (Selgas, col. 8, lines 9-13 and col. 20, lines 47-50).

9. As to claim 5, **Selgas** teaches the method of claim 4, wherein the at least one modem configuration parameter includes a dialed number parameter and a connection speed parameter (the updated ISP-specific access information comprising information such as one or more PAP IDs/passwords and configuration information to configure the user's modem, such as dial-in number, and speed) (**Selgas**, col. 17, lines 40-65).

Application/Control Number: 10/519,095

Art Unit: 2141

10. As to claim 6, **Selgas** teaches the method of claim 5, wherein the at least one modem configuration parameter further includes a data compression technique parameter and a modulation technique parameter (the updated ISP-specific access information comprising information such as one or more PAP IDs/passwords, default routing information and configuration information to configure the user's modem, such as dial-in number, data speed/compression information) (**Selgas, col. 17, lines 40-65**).

11. As to claim 7, **Selgas** teaches the method of claim 1, wherein:

establishing the network connection includes establishing an Internet connection between the client node and the host node using at least one Internet configuration parameter (the user 110 connects to the Internet 100 via a predetermined ISP 102) (Selgas, col. 6, lines 6-31); and

modifying the at least one network configuration parameter further includes modifying the at least one Internet configuration parameter to establish a second Internet connection (the user 110 reconnects to the Internet 100 via a preferred/desired ISP 102) (Selgas, col. 6, lines 6-31, col. 15, lines 1-19 and col. 17, lines 54-61).

12. As to claim 8, **Selgas** teaches the method of claim 7, wherein the at least one Internet configuration parameter includes a host Internet Protocol (IP) address parameter (when the user contacts the ISP, the user is connected to the next available modem and the IP address of that modem becomes the IP address of that user for the remainder of that connection session) and a connection speed parameter (the updated

Art Unit: 2141

ISP-specific access information comprising information such as configuration information to configure the user's modern, such as dial-in number, data compression information and speed) (Selgas, col. 6, lines 6-31 and col. 17, lines 40-65).

- 13. As to claim 9, **Selgas** teaches the method of claim 8, wherein the at least one Internet configuration parameter further includes a data compression technique parameter and an encryption technique parameter (various databases residing at the access provider and each of the clients systems permits dynamic or constantly changeable network access and encryption parameters to minimize the possibility of unauthorized access) (Selgas, col. 17, lines 40-65 and col. 29, lines 6-13).
- 14. As to claim 13, **Selgas** teaches the method of claim 1, wherein the performance rule includes a rule for specifying performance criteria (which ISP 102 and what locations (dial-in phone numbers for local access) have the highest reliable service, the most available server, etc., for a given user's dial-in location) (**Selgas, col. 8, lines 32-54, col. 10, lines 4-11 and col. 21, line 4 col. 22, line 64)**.
- 15. As to claim 14, **Selgas** teaches the method of claim 1, wherein the policy information further includes host access information used by the client node when modifying the at least one network configuration parameter (the access service 106 tracks and stores information relating to all ISPs 102 and dial-in numbers regarding past history connections so the reliability function may use any one of the types of availability

Art Unit: 2141

information, or combination thereof, for determining the dial-in number that will provide

the user with a high reliability connection) (Selgas, col. 21, lines 31-61).

16. As to claim 15. **Selgas** teaches the method of claim 14, wherein the host access

information includes at least one modem access number (the updated ISP-specific

access information comprising information such as configuration information to

configure the user's modem, such as dial-in number, data compression information and

speed) (Selgas, col. 6, lines 6-31 and col. 17, lines 40-65).

17. As to claim 16, **Selgas** teaches the method of claim 14, wherein the host access

information includes at least one Internet Protocol (IP) address (when the user contacts

the ISP, the user is connected to the next available modem and the IP address of that

modem becomes the IP address of that user for the remainder of that connection

session) (Selgas, col. 6, lines 6-31).

18. As to claim 17, Selgas teaches the method of claim 1, further comprising

terminating the network connection; and establishing a second network connection

based on the modified at least one network configuration (after receiving the ISP-

specific access information, the client dispatch application 200 may disconnect the user

110 from the current ISP 102 and automatically dial and reconnect the user 110 to the

desired ISP 102 associated with the ISP-specific access information, i.e., associated

with the modified network configuration parameter) (Selgas, col. 8, lines 9-13).

Application/Control Number: 10/519,095

Art Unit: 2141

- 19. As to claim 18, **Selgas** teaches the method of claim 1, further comprising sending the configuration history information to the host node (the client dispatch application 200 dispatches a "pinger" message, to the access server 106, with header information including the database 206 that contains access information for each dial-in number for a particular ISP such as one or more PAP IDs/passwords, default routing information and configuration information to configure the user's modem, such as data compression information and speed) (Selgas, col. 9, lines 39-62, col. 11, lines 50-59 and col. 17, lines 40-65).
- 20. As to claim 19, **Selgas** teaches the method of claim 1, further comprising establishing a second network connection based on the modified at least one network parameter; and collecting additional configuration history information on the client node including at least one parameter that is related to the second network connection (the Service Selected sub-function retrieves configuration information from the network services database 206 and sends this information in a data message to the access service 106) (Selgas, col. 20, lines 35-50).
- 21. Claim 20 is a corresponding computer system claim of method claim 1; therefore, it is rejected under the same rationale.

Art Unit: 2141

22. As to claim 21, **Selgas** teaches the computer system of claim 20, further comprising an input/output device (i.e., the user computer/laptop 1150/1180 comprising a modem, keyboard, screen, mouse, speakers, etc.) (**Selgas, Figs. 20-21**).

- 23. As to claim 22, **Selgas** teaches the computer system of claim 20, further comprising a network adaptor (i.e., comprising an Ethernet card) to interface with a network device during establishment of the network connection (**Selgas, col. 15, lines 35-40**).
- 24. As to claims 23-24, **Selgas** teaches the computer system of claim 22, wherein the network device is a modem (one of the plurality of modems of the ISP 102) (**Selgas**, **Figs. 20-21**).
- 25. Claim 25 recites a corresponding computer system comprising means for performing the method claim 1; therefore, it is rejected under the same rationale.
- 26. Claim 26 recites a computer-readable medium having computer-executable instructions contained therein for performing the method claim 1; therefore, it is rejected under the same rationale.
- 27. As to claims 27-31, **Selgas** teaches the method of claim 1, wherein accessing the configuration history information includes accessing the configuration information,

Application/Control Number: 10/519,095

Art Unit: 2141

stored on the client node, related to a last network connection speed, dialed number, Internet protocol, performance associated with the previous connection (collecting and storing the network services information, i.e., configuration history information, in various databases 204-210 such as the network services database 206 on the user node 110a, 110b, wherein the network services database 206 contains access information for each dial-in number for a particular ISP such as one or more PAP IDs/passwords, default routing information and configuration information to configure the user's modem, such as data compression information and speed) (Selgas, Fig. 2, col. 9, lines 39-62 and col. 17, lines 40-65).

- 28. As to claim 32, **Selgas** teaches the method of claim 1, wherein accessing the policy information includes accessing a desired network configuration performance rule that relates to at least one of failure rate information, abnormal disconnect rate, connect failure rates, retain rates, busy rates, or signal-to-noise rate of the previous network connection (accessing the Client and Server Histogram data) (Selgas, col. 21, lines 4-61 and col. 23, lines 1-44).
- 29. As to claim 33, **Selgas** teaches the method of claim 1, further comprising accessing the policy information from storage on the client node (i.e., the network services database 206) (**Selgas**, col. 10, lines 4-11).

lines 9-13 and col. 20, lines 47-50).

Art Unit: 2141

30. As to claim 34, **Selgas** teaches the method of claim 1, wherein modifying the at least one network configuration parameter includes modifying the at least one network configuration parameter used to establish the network connection between the client node and the host node so that the network connection is configured to operate as the

desired network connection (Selgas, col. 8, lines 32-54 and col. 21, line 4 - col. 22,

line 64).

- 31. As to claim 35, **Selgas** teaches the method of claim 3, wherein modifying the at least one modem configuration parameter includes establishing a second network connection with a second modem connection (after receiving the updated ISP-specific access information, the client dispatch application 200 may disconnect the user 110 from the current ISP 102 and automatically dial and reconnect the user 110 to the desired ISP 102 associated with the updated ISP-specific access information, i.e., associated with the modified plurality network configuration parameter) (Selgas, col. 8,
- 32. As to claim 36, **Selgas** teaches the method of claim 1, wherein accessing the policy information includes accessing the policy information indicating that cost considerations are to be prioritized (*i.e.*, for low cost operation) in determining whether the at least one parameter of the previous and node longer active network connection fails to satisfy the desired network connection performance rule (**Selgas**, col. 8, lines 32-54 and col. 20, line 51 col. 21, line 3).

Application/Control Number: 10/519,095

Art Unit: 2141

33. As to claim 37, **Selgas** teaches the method of claim 1, wherein accessing the policy information includes accessing the policy information indicating that performance considerations are to be prioritized (i.e., for reliability and available operation) in determining whether the at least one parameter of the previous and no longer active network connection fails to satisfy the desired network connection performance rule (Selgas, col. 8, lines 32-43, col. 15, lines 25-29 and col. 21, line 4 – col. 22, line 64).

- 34. As to claim 38, **Selgas** teaches the method of claim 1, wherein accessing the policy information includes accessing the policy information indicating that cost and performance considerations are to be used in a predetermined weighting (providing control mechanisms to ensure that a user 110 receives the appropriate level of service for which they are subscribed such as "the lowest cost service", "the highest reliability service", "the most available service", or <u>combinations thereof</u>) in determining whether the at least one parameter of the previous and no longer active network connection fails to satisfy the desired network connection performance rule (**Selgas, col. 8, lines 32-43, col. 15, lines 25-29 and col. 21, line 4 col. 22, line 64)**.
- 35. Claims 39-57 recite method claims that contain features similar to the above-recited features of claims 1, 3-9, 17, 19, 28-32, 34 and 36-38; therefore, it is rejected under the same rationale.

Application/Control Number: 10/519,095

Art Unit: 2141

Response to Arguments

36. In the Remarks, Applicants argued in substance that

(A) Prior Art (Selgas) fails to describe or suggest at least "using the configuration history information along with the policy information to determine whether at least one of the parameters of the previous and no longer active network connection fails to satisfy the desired network connection performance rule; and if it is determined that the at least one of the parameters of the previous and no longer active network connection fails to satisfy the desired network connection performance rule, modifying the at least one network configuration parameter used to establish the network connection between the client node and the host node", as recited in claim 1.

As to point (A), Selgas teaches collecting and storing various user and network services information in several databases 204-210 on the user node 110, wherein the network services database 206 contains access information for each dial-in number for a particular ISP such as one or more PAP IDs/passwords, default routing information (i.e., gateway address information), default directory information (including domain name server information), sub-protocols for the PPP, and configuration information for the hardware to configure the user's modem, such as data compression information and speed (i.e., Selgas does teach collecting and storing configuration history information in the network services database 206) (Selgas, Fig. 2, col. 9, lines 39-62).

Art Unit: 2141

In addition, **Selgas** teaches the network services database 206 includes information relating to the type of service requested by the user 110, such as the "lowest cost service", the "highest reliability service", the "most available service", or combination thereof, plan pricing and descriptions, and includes information identifying one or more primary processes to be performed by the client dispatch application 200 (i.e., **Selgas** does teach <u>collecting</u> and storing policy information in the network services database 206) (**Selgas**, col. 10, lines 4-11).

Selgas also teaches the access service 106 reviews the pinger header information including the network services database 206 as described above containing configuration history information along with the policy information to determine, if any, what updates are required to be made to the user client's dispatch application, databases, or network access devices operating system (i.e., corresponding to the access service 106 using the configuration history information along with the policy information stored in the network services database 206 to determine if at least one of the parameters of the previous and no longer active network connection such as dial-in locations/numbers. PAP IDs/passwords, etc., fails to satisfy the desired network connection performance rule), wherein such updates may include new dial-in locations, new identification information such as PAP IDs, network authentication passwords such as PAP passwords, other IDs/passwords, change of phone numbers, area codes, low cost ISP, dial-in location priority sequence numbers, or any combination thereof, or any other information relating to gaining access to the ISP 102. If any updates are required, these are supplied by the access service 106 and any necessary updates will take place

Art Unit: 2141

transparent to the user 110 (i.e., and if it is, modifying the at least one network

configuration parameter used to establish the network connection between the client

node and the host node) (Selgas, col. 17, lines 50-65).

Hence, Prior Art (Selgas) does describe or suggest at least "using the

configuration history information along with the policy information to determine whether

at least one of the parameters of the previous and no longer active network connection

fails to satisfy the desired network connection performance rule; and if it is determined

that the at least one of the parameters of the previous and no longer active network

connection fails to satisfy the desired network connection performance rule, modifying

the at least one network configuration parameter used to establish the network

connection between the client node and the host node", as recited in claim 1.

Conclusion

37. Applicant's arguments as well as request for reconsideration filed on 06/12/2007

have been fully considered but they are not deemed to be persuasive.

Application/Control Number: 10/519,095

Art Unit: 2141

38. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Quang N. Nguyen whose telephone number is (571)

272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the

organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Quang W. Nguyen Patent Examiner

AU - 2141